

TO ALL TO WHOM THESE PRESENTS SHALL COME:

## Monsanto Jechnology TTG

THERE HAS BEEN PRESENTED TO THE

#### Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, SONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR CONDITIONING IT OPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR CONDITIONING IT OF ANY OF THE ABOVE PURPOSE, OR USING IT IN PRODUCING A HYBRID OR WARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84)

#### SOYBEAN

'A2869'

In Testimonn Marrest, I have hereunto set my hand and caused the seal of the Plant Bariety Frotestion Office to be affixed at the City of Washington, D.C. this nineteenth day of September, in the year two thousand and three.

Mark Hermelin Ating Commissioner

Plant Variety Protection Office Agricultural Marketing Service Secretary of

Limited Liability	Company							
10. NAME AND ADDRESS OF OWNER REF	PRESENTATIVE(S) TO SERVE IN THIS APPLIC	ATION, (Fir	rst person listed will receiv	e all papers)	E	FILING AND EXAMINATION FEES:		
Donald Steffen 634 E. Lincoln W Ames, IA 50010	•				THE SECTION OF THE SE	s 2,450.00 DATE 5/28/2003		
			_			certification fee: \$ 432.00 Date 9/12/2003		
11. TELEPHONE (Include area code)	12. FAX (include area code)	13. E-M/	AIL		14. CROP KIND	(Common Name)		
(515) 956-3002	(515) 232-6905	dona	ald.e.steffen@m	ionsanto.com	S	oybean		
15. GENUS AND SPECIES NAME OF CROP		16, FAM	IILY NAME (Botanical)		17. IS THE VARIETY A FIRST GENERATION HYBRID?			
Glycine max		L	egumanacae		YES NO			
reverse)	ATTACHMENT SUBMITTED (Follow instruction	is on	CERTIFIED SEE		the Plant Variety F	BE SOLD AS A CLASS OF Protection Act)  If "no," go to item 22)		
<ul> <li>a.</li></ul>			and 21 below)  20. DOES THE OWNER SPECIFY THAT SEED OF THIS YES NO VARIETY BE LIMITED AS TO NUMBER OF CLASSES?  IF YES, WHICH CLASSES? FOUNDATION REGISTERED CERTIFIED					
verification that tissue culture wi repository)	untreated seeds or, for tuber propagated varieties ill be deposited and maintained in an approved po ,705), made payable to "Treasurer of the United		LIMITED AS TO N IF YES, SPECIFY NUMBER 1, 2, 3, 6		IS?	YES NO SISTERED CERTIFIED cated on the reverse.)		
22. HAS THE VARIETY (INCLUDING ANY HA FROM THIS VARIETY BEEN SOLD, DISP OTHER COUNTRIES?		OR ANY COMPONENT OF T (PLANT BREEDER'S RIC		ROTECTED BY INTELLECTUAL 7				
YES	<b>⊠</b> NO		☐ YES		⊠ NO	•		
IF YES, YOU MUST PROVIDE THE DATE FOR EACH COUNTRY AND THE CIRCUI	OF FIRST SALE, DISPOSITION, TRANSFER, MSTANCES. (Please use space indicated on rev	OR USE verse.)		NTRY, DATE OF FILING O BER. <i>(Please use space ir</i>				
<ol> <li>The owners declare that a viable sample of for a tuber propagated variety a tissue culting.</li> </ol>	f basic seed of the variety will be furnished with a ure will be deposited in a public repository and r	application naintained	and will be replenished up for the duration of the cer	oon request in accordance tificate.	with such regulation	ns as may be applicable, or		
The undersigned owner(s) is(are) the owner and is entitled to protection under the provi	er of this sexually reproduced or tuber propagate isions of Section 42 of the Plant Variety Protectio	d plant vari	iety, and believe(s) that th	e variety is new, distinct, ur	niform, and stable a	is required in Section 42,		

SIGNATURE OF OWNER

NAME (Please print or type)

CAPACITY OR TITLE

S&T-470 (04-01) designed by the Plant Variety Protection Office with WordPerfect 6.0a. Replaces STD-470 (02-99) which is obsolete.

Owner(s) is(are) informed that false representation herein can jeopardize protection and result in penalties

SIGNATURE OF OWNER

NAME (Please print or type)

CAPACITY OR TITLE

Donald Steffen

Oilseeds IP/Reg. Affairs Manager

(See reverse for instructions and information collection burden statement)

DATE

### MONSANTO TECHNOLGY LLC PVP APPLICATION - A2869

#### **EXHIBIT A**

#### ORIGIN AND BREEDING HISTORY

- 1991 Final cross was made in 1997 at Ames, Iowa.
  - Parentage: Jack\*A2835
- 1991 F1 generation was grown at Isabela, Puerto Rico and advanced using modified pedigree selection.
- 1992 F2 generation was grown at Isabela, Puerto Rico and advanced using modified pedigree selection.
- 1992 F3 bulk populations were grown at Ames, Iowa and single plants pulled.
- 1993 F3 derived F4 plants were grown at Ames, Iowa in progeny rows and variety FP2969 was selected based on yield, early vigor, lodging, and resistance to leaf and plant diseases including, but not limited to, PRR, SDS, BSR, and stem canker.
- 1994 F3:5 breeder seed was grown at Ames, Iowa for progeny row increase and in yield tests at 11 locations in Iowa.

Variety FP2969, now named A2869, was observed to be uniform and stable for the characteristics described within this application based on our observations since 1994 and, henceforth, to present. No variants were observed during this time.

Variety A2869 has continued to be grown in yield tests at 11 locations in 1995 and 37 locations in 1996 for comparison against other varieties to determine how it would be used in our marketing program.

## MONSANTO TECHNOLGY LLC PVP APPLICATION - **A2869**

#### EXHIBIT B

#### **NOVELTY STATEMENT**

To our knowledge, the soybean varieties that closely resemble A2869 are Jack, and A2835:

1. Hilum color

A2869

- Buff

Jack

- Imperfect Black

A2835

- Yellow

# U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE LIVESTOCK, MEAT, GRAIN & SEED DIVISION PLANT VARIETY PROTECTION OFFICE BELTSVILLE, MARYLAND 20705

## OBJECTIVE DESCRIPTION OF VARIETY SOYBEAN (Glycine max LJ

	TEMPORARY DESIGNATION	VARIETY NAME	
MAME OF APPLICANTISI			
Monsanto Lechnology LLC (8T: 7/4/2003)	-FP2969	A2869	**************************************
AOORESS (Street and No., or R.F.D. No., City, State, and Zia C	Code!	<u> </u>	icial use only
-2605 East Kilgore Road 634 E. Liv		PVPO NUMBER	
Kalamazoo, Michigan 49001 Ames,	Iowa 50010 (pt: 7/4/2003)	<u> </u>	
Choose the appropriate response which characterizes the	variety in the features described	below. When the at	imber of significant s
in your answer is fewer than the number of boxes provide	a, place a zero in the tirat box w	nen number is 3 or	less (e.g., [U] 9])
Starred characters * are considered fundamental to an add	ednate soloesu arrietà gescubac	on. Other characters	t tuonia pe describes
when information is available.  1. SEED SHAPE:	n •		· · · · · · · · · · · · · · · · · · ·
	v = v		
2	:   -		
t = Spherical (L.W. U.T. and T/W ratios = < 1.2) 3 = Stongate (U.T. ratio > 1.2) T/W = < 1.2)	2 = Spherical Flattened ( 4 = Blongare Flattened (		
★ 2. SEED COAT COLOR: (Matture Seed)			
1 - Yetlaw 2 - Green 3 - Brown	4 = Black 5 = Other /	Specifyl	
1 SEED COAT LUSTER: [Meture Hand Shelled Seed]		***	
1 = Out ('Carsov 79': 'Braxton') 2 = Shiny ('Neb:	soy'; 'Gasoy 17')		
r 4. SEED SIZE: (Mature Sood)			
1 6 Grams per 100 seeds			
5. HILUM COLOR: (Mature Seed)			
1 = 3uff 2 = Yellow 3 = 3rown	4 = Gray 5 = Imperfect Slad	k 5 = Black	7 = Other (Socciful)
6. COTYLEDON COLOR: (Mature Seed)			
1 * Yetlaw 2 * Green			
7. SEED PROTEIN PEROXIDASE ACTIVITY:			
2 1 4 Low 2 = High			
8. SEED PROTEIN ELECTROPHORETIC BAND:			
2 1 - Type & (SP14) 2 - Type & (SP15)			
9. HYPOCOTYL COLOR:		· · · · · · · · · · · · · · · · · · ·	
1 1 1	h bronze band below cotyledons ("Y	(podworth"; "Tracy")	
3 = Light Purple below cotyledons ('Seeson'; 'Pickett 71') 4 = Oark Purple extending to unifoliate leaves ('Hodgson';	'Caker Hamoton 266A')		
10. LEAFLET SHAPE:			
n In Lanczolate In Oval. In Ovale	4 + Other (Specify)		

11. LEAFLET SIZE:  1 * Small ('Armoy 71'; 'A531Z') 3 * Large ('Crawford'; Tracy')	Z = Medium ("Carsey 79"; "Gasoy 17")	009700316
12. LEAF COLOR:  1 = Light Green ('Weber'; 'York')  3 = Dark Green ('Gnome'; 'Tracy')	2 = Medium Green ("Carsov 79"; "Braxton -	.,
# 13. FLOWER COLOR:  1 - White 2 - Purple	3 - White with purple throat	
14 POD COLOR:  2 - 3rown	3 = Black	
★ 15. PLANT PUBESCENCE COLOR:  1 1 * Grav 2 * Brown (Tawny)		
16. PLANT TYPES:  1 = Stencer ("Essex"; "Amsoy 71")  3 = Busny ("Gnome"; "Govan")	2 = Intermediate ('Amcor'; 'Braxton')	
# 17. PLANT HABIT:  1 = Determinate ("Gnome"; "Braxton") 3 = Indeterminate ("Nebsoy"; "Improved Peli	2 • Semi-Determinate (Will")	
★ 18. MATURITY GROUP:  0   5   1 - 000   2 - 00   3 - 0   9 - VI   10 - VII   11 - VIII	4 = 1	7-1V 8-V
# 19. DISEASE REACTION: (Enter 0 = Not Tested: 1 = Sc  BACTERIAL DISEASES:  # 0 Bacterial Pustule (Xanthomonas phaseou var.  # 0 Bacterial Blight (Pseudomonas glycinea)		
→ Wildfire (Pseudomanzs czasci)  FUNGAL DISEASES:  → ① Brown Soot (Seatoria grycines)		
Frageye Leaf Soot (Carcaspara solina)  ** ① Race 1 ① Race 2 ① Race  ① Target Soot (Carynespara cassicala)  ② Downy Mildew (Peranaspara trifatiorum var.  ② Powdery Mildew (Microsonaera diffusa)		Other (Specify)
3 Stown Stem Rot . Cophilosparium gregatumi	iivors)	

13. DISCASE REALITION: TEnter 0 - Not 1 exted; 1 - Suscepti	bie; 2 * Resistant) (Continued)		
FUNGAL DISEASES: (Continued)		00970039	6
Pod and Stem Blight (Diaparme phaseolorum var: s	oisel	and the first of t	Ø
Purole Seed Stain (Corcospora kikuchii)			
O Rhizoctonia Root Rot (Rhizoctonia solani)			
Phytophthora Rot (Phytophthora megatoenna var. s	زمدره زمدره		
★ 1 Race 1 0 Race 2 1 Race 3	1 Race 4 0 Race 5	0 Race 5 0 p	Race 7
0 Race 8 0 Race 9 0 Other (Spec			
VIRAL DISEASES:			
0 Bud Blight (Tobacca Ringspat Virusi			
O Yellow Mosaic (Bean Yellow Mosaic Virus)			
* 0 Cowdea Mosaic (Cowdea Chlorotic Virus)			
O Pod Mottle (Bean Pod Mottle Virus)	•		
Seed Mottle (Saybean Mostle Virus)			
NEMATODE DISEASES:			
Saybean Cyst Nematode (Heterodera givoines)			
* 1 Race 1 1 Race 2 2 Race 3	0 Race 4 2 Other (S	sacityi Race 14	
D Lancz Nematode (Hoololaimus Calombus)  X D Southern Root Knot Nematoce (Melaidogyne incagnita)			
Northern Root Knot Nematooe (Meloidagyne Haola)			
Pesnut Root Knot Nematode (Meloidogyne arenana)			
Renitorm Nematode (Ratylenenulus reniformis)			
1 OTHER DISEASE NOT ON FORM (Specify): Sudo	ien Death Syndrome		
	<u> </u>		
20. PHYSIOLOGICAL RESPONSES: [Enter 0 = Not Tested: 1 = Suss	comble: 2 = Resistanti	-	
★ 1 Iron Chlorosis on Calcareous Soil			
O Other (Soecify)		<del></del>	
21. INSECT REACTION: (Enter 0 = Not Tested: 1 = Susceptible: 2 =	Reservant)		
Mexican dean Beette (Epilacana vanvestis)			
O Potato Lezi Hopper (Emposses (absel			
Other (Specify)		•	
INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES TH	AT SUBMITTED		
CHARACTER NAME OF VARIETY	CHARACTER	NAME OF VARIETY	
Plant Shape Jack	Seed Coat Luster	A2835	
Leaf Shape	Sced Size	A3237	
Lesi Calar	Seed Shape	A2835	
_cat 5/20	Scedling Pigmentation		
	• 1		

T

					 _	 (22)	A	B
22.	CIVE DATA FOR SUBMITTED AND SIMILAR STANDARD VARIETY: Paired Comparison Date	. ()	0	9	0	3		0

VARIETY	9 MATURITY	PLANT LOOGING SCORE		CM PLANT		LEAFLET SIZE		SEED CONTENT		SEED SIZE G/100	NO.
			HEIGHT	CM Width	CM Langen	% Protein	% CH	SEEDS	\$EEDS/ 200		
A2869 Submitted			88	<u>.</u>				16			
A2833 Name of Similar Variety	132	1.2	76					14	<del></del>		

PUBLICATIONS USEFUL AS REFERENCE AIDS FOR COMPLETING THIS FORM:

- 1. Caldwell, B.E., ed. 1973. Saybeans: Improvement, Production, and Uses. Amer. Soc. Agran. Managraph No. 16.
- 2. Suttery, 8.R. and R.I. Buzzell. 1968. Peroxidase activity in seeds of soyocan varieties. Crop Sci., 3: 722-725.
- 3. Hymowstz, T. 1973. Electrophoretic analysis of S8TI-Ag in the USDA soybean germolasm collection. Crop Sci., 13: 420-421.
- 4. Payne, R.C. and L.F. Morris. 1975. Differentiation of soybean cultivars by seedling pigmentation partition. 3. Seed Technol. 1: 1-19.

MONSANTO TECHNOLGY LLC PVP APPLICATION - **A2869** 

#### EXHIBIT D

#### ADDITIONAL DESCRIPTION OF INVENTION

A2869 is a late maturity group II variety with resistance to Race 3 and moderate resistance to Race 14 of Soybean Cyst Nematode (SCN). It has very high yield potential. It has a well-branched canopy, making it well adapted to wide rows. It is very broadly adapted but should do very well on lighter soils and on SCN infested soils. Although it has no major gene for Phytophthora resistance, it appears to have good levels of field tolerance. It also has demonstrated better than average tolerance to iron deficiency chlorosis and average brown stem rot tolerance

REPRODUCE LOCALLY. Include form number and edition date on all reproduc	actions.	FORM APPROVED - OMB No. 0581-0058		
U.S. DEPARTMENT OF AGRICULTURE				
AGRICULTURAL MARKETING SERVICE	Application is required in order to determine if a plant variety protection			
	certificate is to be issued (7 U.S.C. 2421). The information is held			
EXHIBIT E	confidential until the certificate is issu	ued (7 U.S.C. 2426).		
STATEMENT OF THE BASIS OF OWNERSHIP				
NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION	3. VARIETY NAME		
	OR EXPERIMENTAL NUMBER			
Monsanto Technology LLC	FP2969	A2869		
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country)	5. TELEPHONE (Include area code)	6. FAX (Include area code)		
634 E. Lincoln Way	(515) 232-7170			
~	(313) 232-7170	(515) 232-6905		
Ames, IA 50010				
	7. PVPO NUMBER			
		0700316		
8. Does the applicant own all rights to the variety? Mark an "X" in t	the appropriate block. If no, please expl	ain. YES NO		
		x		
		<u> </u>		
9. Is the applicant (individual or company) a U.S. National or a U.S.				
3. Is the applicant (individual of company) a 0.5. National of a 0.5.	. based company? If no, give name of	-		
		X		
	NO If no, please answer one of	the following:		
X				
a. If the original rights to variety were owned by individual(s), is	(aro) the original surrey(a) a LLC. Mating	-1/-10		
	NO If no, give name of country			
	and, give tialine of dealing,			
b. If the original visits to undetermine and the control of				
b. If the original rights to variety were owned by a company(ies)	), is (are) the original owner(s) a U.S. bas NO If no, give name of country			
	n no, give name or country	•		
A A A A A A A A A A A A A A A A A A A				
11. Additional explanation on ownership (If needed, use the reverse	for extra space):			
PLEASE NOTE:				
Diant consists materials and a little of the constant of				
Plant variety protection can only be afforded to the owners (not licens	sees) who meet the following criteria:			
1. If the rights to the variety are owned by the original breeder, that pe	erson must be a U.S. national, national o	f a UPOV member country, or		
national of a country which affords similar protection to nationals of	f the U.S. for the same genus and specie	es.		
	·			
2. If the rights to the variety are owned by the company which employ	/ed the original breeder(s), the company	must be U.S. based, owned by		
nationals of a UPOV member country, or owned by nationals of a c genus and species.	country which affords similar protection to	nationals of the U.S. for the same		
3. If the applicant is an owner who is not the original owner, both the o	original owner and the applicant must me	eet one of the above criteria.		
The original breeder/owner may be the individual or company who dire Act for definitions.	ected the final breeding. See Section 41	(a)(2) of the Plant Variety Protection		
According to the Paperwork Reduction Act of 1995, an agency may no conduct or sponsor, at	and a person is not required to respond to a collection	of information unless it displays a valid OMB		
control number. The valid OMB control number for this information collection is 0581-0055, response, including the time for reviewing the instructions, searching existing data sources, g	The time required to complete this information callecti	on in antimated to success Coults t		
The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs on the	hacis of race color potional origin conduct colision	and all and title and the state of the state		
and marital or familial status. (Not all prohibited bases apply to all programs). Persons with disudiotape, etc.) should contact the USDA's TARGET Center at 202-720-2600 (voice and TDC	ilsabilities who require alternative means for communi	age, uisability, political beliefs, sexual orientation, cation of program information (braille, large print,		
addictable, etc.) should contact the OSDA's TARGET Center at 202-720-2000 (Voice and TDL	٦).			
Fo file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.	v, vvnitten Building, 14" and Independence Avenue, S	W, Washington, D.C. 20250-9410 or call (202)		